

REMARKS

Claims 1-10 are pending. Claims 11-16 have been withdrawn Claims 17 and 18 have been added.

Claim Objections

Claim 1 stand objected to because of the informalities.

In response, Applicants have amended claim 1,

Accordingly, withdrawn of the objection is respectfully requested.

§ 103 Rejections

Claims 1-10 stands rejected under 35 USC § 103(a) as being unpatentable over Tuschy et al. WO 96/21413 a1) in view of Nguyen et al. (US 5,616,629 A) AND Newman et al. (US 3,716,437).

The rejection of claims 1-10 as rejected is respectfully traversed.

It is acknowledged in of the office action that claims 1 – 10 are novel over references Tuschy et al and Nguyen et al.

Claims 1 – 10 are also inventive over the references Tuschy et al, Nguyen et al and Newman et al.

The present invention relates to an adhesive tape having a release-treated fibrous backing, a relatively strong adhesive having a 90° peel adhesion of at least 6 N/2.54 cm relative to a polyethylene film surface and simultaneously a relatively low release force of less than 1 N/2.54 cm as is evidenced by the Keil test. The release coating alleged to meet this limitation if applied to the Tuschy et al product, as modified by Newman et al, is Nguyen et al. First it is noted that NGUYEN ET AL does not really lend itself to suggest use in a tape such as described by Tuschy et al. It is true that NGUYEN ET AL lists nonwoven fabrics in the enumeration of substrates to which the release coatings can be applied (see col. 9, lines 42 – 46), however this is not the

preferred substrate which is paper and films (note col. 9 lines 64-65). This is hardly the Tuschy et al product. NGUYEN ET AL doesnot address the specific combination covered in claim 1 of the present patent application relating to an adhesive tape comprising a fibrous backing, a relatively strong adhesive having a 90° peel adhesion of at least 6 N/2.54 cm and a relatively low release force of not more than 1 N/2.54 cm (see claim 1).

Contrary to this, Nguyen et al. (US 5,616,629) provides "release compositions exhibiting high and controlled release values" (col. 1, lines 14 – 15). It is also mentioned in col. 11, lines 4 – 5 that "a desirable high release force is required", and col. 12, line 6 refers to the "improved high release properties". The release composition of Nguyen et al. Nguyen et al. comprises as a mandatory component the so-called MQ resins of formula (II) (col. 4, lines 38 – 39 and col. 5, lines 3 – 6). MQ resins are known to increase the release force; it is speculated that they tend to be incorporated into the release surface provided by the polydialkyl siloxane, therefore decreasing the exposed surface of the polydialkyl siloxane and consequently increase the release force. Comparative example 3 in applicants specification shows this, where an MQ resin was used and the Kiel value was greater than 4 N/2.54 cm.

NGUYEN ET AL provides in table VIII, col. 13, lines 1 – 27 release forces to various adhesives including, for example, a rubber-based adhesive A which typically is very strong. It is true that some of the release forces reported for adhesive A in table VIII are less than 1 N/2.54 cm. It has to be noted, however, that these measurements were not obtained using the Keil test specified in the present patent application, which employs a temperature of 70 °C and a weight of 450 g (see page 24, lines 8 – 10 of the specification as filed originally). Contrary to this, in the Examples of table VIII, a temperature of 23 °C and no weight is used (see col. 12, line 59), which tends to result in lower forces than obtained in the present patent application. Also, the release composition is applied to a Kraft paper while the adhesive tape of the present invention comprises a fibrous layer of woven fibers or nonwoven fibers (see claim 1). The Kraft paper exhibits a smooth, homogenous surfac which tends to result in lower release forces than a fibrous surface exhibiting a multitude of open pores which do not provide release properties. Similar comments can be made to the examples reproduced in table VII where in col. 12 a temperature of

140 °F (= 60 °C) was used whereas the Keil test of the present invention uses a temperature of 70 °C (= 158 °F) and a weight of 450 g.

This means in other words that the values for the release forces obtained in NGUYEN ET AL and in the present patent application are not comparable and that distinctly higher values would be obtained for the release compositions of NGUYEN ET AL when evaluating them according to the test methods of the present patent application. As earlier mentioned this is evidenced by applicants Comparative example 3 where an MQ resin was used and the Kiel value was greater than 4 N/2.54 cm.

In summary it has to be noted that NGUYEN ET AL does not address the problem of the present invention and actually teaches away from the present invention because it relates to release coatings providing a high release force. NGUYEN ET AL has an object which is diametrically opposed to the object of the present invention so that the person skilled in the art would not combine NGUYEN ET AL with any of Tuschy et al, and/or Newman et al.

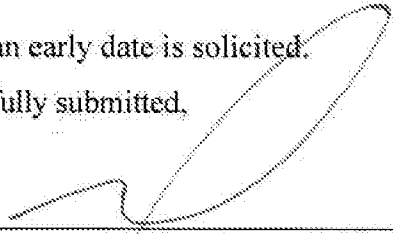
Therefore it is submitted that the claims 1 -- 10 as filed originally are patentable over references Tuschy et al, Nguyen et al and Newman et al.

In view of the above, it is submitted that the application is in condition for allowance. Reconsideration of the application is requested.

Allowance of claims 1-18, as amended, at an early date is solicited.

Respectfully submitted,

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